

REMARKS

Claims 1-12 and 14-36 are pending in this application. All of the pending claims were rejected. Claims 1, 12, 24, and 31 are currently amended. Reconsideration is respectfully requested.

Claims 1, 12, 24, and 31 have been amended to recite that the optical communication network is one in which data is transported and processed only in optical form, and that the services include provision of a new optical path between specified nodes. As discussed in the Specification, “the optical internet infrastructure is evolving from a statically provisioned SONET ring-based transport network to a more dynamically provisioned mesh network.”¹ Further, the network includes “optical cross-connect switches (OXCs) that are used to form the mesh network.”² Using the ASON UNI, “users 110, 130 can request an optical communication path having certain attributes, renegotiate the attributes of the optical communication path, control switching of the optical communication path, terminate the optical communication path, and monitor operation of the ASON.”³ It will therefore be appreciated that the context in which aspects of the invention are described in the detailed description is an all-optical network, and that at least one aspect of the invention is providing an optical communication path in that network.

Claims 1-12 and 14-36 were rejected under 35 U.S.C. §102(e) as being anticipated by Sistanizadeh. Applicant respectfully traverses. Sistanizadeh describes a network in which transport links might be optical, but in which the nodes are clearly electrical. Note that

¹ Page 6, lines 29-31

² Page 7, lines 6

³ Page 8, lines 17-20

Sistanizadeh states that IP-over Ethernet on fibre network is supported.⁴ The use of IP implies routing, a protocol which cannot be executed in the optical domain because there is no practical technique for optically buffering packets while table lookups are performed. Techniques for managing bandwidth in the electrical domain have been known for some time. What has not been known, however, is an agile optical network where new wavelengths can be set up and torn down automatically. Today, if an enterprise in California requires an additional OC-3 pathway to a data backup facility in Florida, that enterprise must contract with a carrier, which will then manually provision the OC-3. The process is notoriously slow, and renders impractical the notion of the customer purchasing that pathway for a short period of time when it is actually utilized. The presently claimed invention represents a technique for speeding the process by automating provisioning in the optical domain, such that a request could be filled in seconds rather than weeks or months. Further, this can be done without exposing sensitive network topological data to the user. Claim 1 recites these features, and therefore distinguishes Sistanizadeh, by reciting “an optical service agent including: a user-to-network interface (UNI) for interfacing with an optical communication network in which data is processed and transported only in optical form ... optical service logic for interacting with the optical communication network via the UNI ... for providing said bandwidth management services for the user, including provision of a new optical communication path between specified nodes in the optical communication network.” Claims 12, 24, and 31 recite similar limitations, and claims 2-11, 13-23, 25-30, 32-36 are dependent claims which further distinguish the invention, and which are allowable for the same reasons as their respective base claims. Withdrawal of the rejections of claims 1-36 is therefore requested.

⁴ See, e.g., Abstract

Claims 14-19 were rejected under 35 U.S.C. §112. The Office states that the limitation “as in claim 13” lacks antecedent basis. Applicant respectfully traverses on the grounds that the cited phrase does not actually appear in those claims, and that both the cited phrase and the phrase actually used are appropriate. Claims 14-19 are simply dependent claims which make reference to claim 13 in an unambiguous and typical manner which has been acceptable to the Office for years. In particular, the claims recite “the device of claim 13.” Withdrawal of the rejection is therefore requested.

Should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone the undersigned, Applicants' Attorney at 978-264-4001 so that such issues may be resolved as expeditiously as possible. For these reasons, and in view of the above amendments, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,

10/10/2006
Date

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Docket No. 120-176